

Remarks

The above Amendments and these Remarks are in reply to the Office Action mailed April 23, 2003 in the above-identified patent application.

Claims 1-28 were pending in the Application prior to the outstanding Office Action. In the Office Action, the Examiner rejected claims 1-28. The present Response cancels claims 5, 6, 10, 15, 16 and 20, adds claims 29 and 30, and amends claims 1-4, 8, 9, 11-14, 17-19, 21-28, leaving for the Examiner's present consideration claims 1-4, 7-9, 11-14, 17-19 and 21-30. Reconsideration of the rejections is requested.

I. OBJECTION TO SPECIFICATION

The Examiner objected to the specification "because on page 9 of the specification, it is indicated that the second electrode 242 is teardrop or V-shaped in Figures 5I-5J...these figures only illustrate the second electrodes as teardrop, not V-shaped."

The specification has been amended to clarify that the front portions of Figures 5I-5J are V-shaped. Additionally, Figure 5K has been added to conform to the language of the specification. Additional language has been added to clarify the "V-shape" and to reference Figure 5K. It is submitted that no new matter has been added in clarifying the specification. Applicants believe that the amendment places the specification in acceptable form, and accordingly, Applicants respectfully request the withdrawal of this objection.

II. REJECTIONS UNDER 35 U.S.C. §112

Claims 22, 24, 26 and 28

The Examiner rejected claims 22, 24, 26 and 28 under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art

to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Applicants respectfully traverses this rejection.

The Examiner argues that the claims contain "said second electrode is V-shaped with a small rounded end" which does not have proper support in the specification or the drawings. The Applicants submit that claims 22, 24, 26 and 28 find support in paragraph 133 of the specification which originally reads "[o]verall, the electrode **242** is teardrop or 'V' shaped with the nose **246** located closer to the first array of electrodes **230**." The Applicants further submit that claims 22, 24, 26 and 28 find support in added Figure 5K. Applicants further submit that one of ordinary skill in the art would understand how to construct a "V" shaped electrode. The Applicants therefore request that the rejection of claims 22, 24, 26 and 28 under 35 U.S.C. § 112 be withdrawn.

III. REJECTIONS UNDER 35 U.S.C. §112

The Examiner rejected claims 1-8, 11-18, 21-22, 24-26, and 28 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regards as the invention. Applicants respectfully traverse the rejections of claims 1-4, 7, 8, 11-14, 17, 18, 21, 22, 24-26 and 28.

Claims 1, 7, 8, 11, 17 and 18

The Examiner argues that claims 1-8 and 11-18 "fails to point out what is included or excluded by the claim language" and that "there would be innumerable of references teaching these limitations."

The Applicants submit that claims 1 and 11 are definite within the meaning of 35 U.S.C. 112, second paragraph because claims 1 and 11 define an orientation of a second electrode ("two or more surfaces *defining a channel for the flow of air* in the downstream direction") and relative geometry of the surfaces of the second electrode ("wherein at least two of the surfaces *meet at an oblique angle*") (Emphasis

added). A reference must include at least these features to teach the invention. The Applicants submit that NONE of the references teach these features. For example, the electrode shown in Figure 1B and 1C of the application (the prior art) includes two surfaces (a top surface and a bottom surface) defining **two different channels** for the flow of air (a top channel and a bottom channel). Figures 5G and 5H, however, show multiple surfaces meeting at oblique angles defining **a single channel** for the flow of air.

The Examiner states that “the specific definition of the type of angle(s) of the surfaces of the second electrode is required.” Applicants submit that the type of angle of the surfaces is defined as being “oblique.” Applicants therefore submit that claims 1 and 11 are definite under 35 U.S.C. § 112, second paragraph. Claims 7, 8, 17 and 18 ultimately depend from claims 1 or 11, and therefore are definite at least with regard to the structure of the second electrode discussed above. The Applicants therefore respectfully request that the rejection of claims 1, 7, 8, 11, 17 and 18 under 35 U.S.C. § 112 be withdrawn.

Claims 2 and 12

The Applicants further submit that the language of claims 2 and 12 point out what is included or excluded. Claim 2 and 12 recite a “plurality of second electrodes...*nested to form a channel for the flow of air in the downstream direction*; and wherein each of said plurality of second electrodes *includes at least one bend*, the at least one bend being coordinated to support nesting” (Emphasis added). Claims 2 and 12 are definite within the meaning of 35 U.S.C. 112, second paragraph because claims 2 and 12 define an orientation of the plurality of second electrodes (“nested to form a channel for the flow of air in the downstream direction”), and geometry (“includes at least one bend”).

The Examiner argues that with regards to claims 2 and 12 (and others), “there would be innumerable of references teaching these limitations.” As stated above, a reference must include at least these features to teach the invention. The Applicants submit that none of the references teach these features. For example, Figures 1B and 1C of the application (the prior art) show two electrodes positioned parallel to one another

and spaced apart. The electrodes are not nested and do not include at least one bend coordinated to support nesting. The Applicants therefore respectfully request that the rejection of claims 2 and 12 under 35 U.S.C. § 112 be withdrawn.

Claims 3, 4, 13 and 14

The Applicants further submit that the language of claims 3 and 13 point out what is included or excluded. Claims 3 and 13 recite “*relative to the direction of the flow of air*, said second electrode has a tail section that is substantially wider than a nose section.” (Emphasis added). Claims 3 and 13 are definite within the meaning of 35 U.S.C. 112, second paragraph because claims 3 and 13 define a relative geometry (“relative to the direction of the flow of air”), and also defines a characteristic of the geometry (“has a tail section that is substantially wider than a nose section”). Claims 4 and 14 further recites that the tail section is “downstream” and the nose section is “upstream,” further defining the geometry of the second electrode.

The Applicants further submit that “the type of angle(s) of the surfaces of the second electrode”, as argued by the Examiner, is no longer required because the angle can be any angle such that “said second electrode has a tail section that is *substantially wider than a nose section*”, a geometry that is sufficiently novel.

The Examiner argues that with regards to claims 3, 4, 13 and 14 (and others), “there would be innumerable of references teaching these limitations.” As stated above, a reference must include at least these features to teach the invention. The Applicants submit that none of the references teach these features. For example, Figure 1B of the application shows a series of second electrodes having nose sections wider than respective tail sections, which taper to a point. Also for example, Figure 1C of the application shows a series of second electrodes having a nose section and tail section of substantially the same width.

The Applicants therefore respectfully request that the rejection of claims 3, 4, 13 and 14 under 35 U.S.C. § 112 be withdrawn.

Claims 5, 6, 15 and 16

The Applicants respectfully request cancellation of Claims 5, 6, 15 and 16.

Claims 22, 24, 26 and 28

The Examiner further argues that claims 22, 24, 26 and 28 are indefinite due to the use of "said second electrode is V-shaped with a rounded end," a construction that puzzles the Examiner ("wouldn't the electrode be U-shaped?"). The Applicants submit, referring to paragraph 133, that the further recited feature, "a rounded end", is intended to communicate that "the nose is rounded so that it does not become an emitter", and is not meant to define by that specific language, a nose having such a large radius that the second electrode assumes a generally U-shape (although this is not intended to preclude the Applicants from claiming a U-shaped geometry in another embodiment). See Paragraph 133. In this sense, combining the "V-shape" with the "rounded nose" can roughly connote, for example at one extreme, a cone or shuttlecock (in profile) shaped electrode consistent with one embodiment of the invention or it can connote an electrode that visibly appears V-shaped, while having an only slightly perceptible roundness.

The claim language is consistent with the language of the specification, communicates accurately the geometry of one embodiment, and is not contradictory, but rather descriptive when taken in total. The Applicants respectfully request that the rejections of claims 22, 24, 26 and 28 under 35 U.S.C. § 112 be withdrawn.

Claims 21 and 25

Still further, the Examiner rejected claims 21 and 25 for reciting the "the pointed end" which lacks sufficient antecedent basis. Claims 21 and 25 no longer recite "the pointed end." The Applicants therefore respectfully request that the rejections of claims 21 and 25 under 35 U.S.C. § 112 be withdrawn.

IV. REJECTION FOR NONSTATUTORY DOUBLE PATENTING

The Examiner rejected claims 1-28 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 and 21-27 of U.S. Patent No. 6,152,146 to Taylor et al. and claims 1-20 of U.S. Pat. No. 6,176,977, also Taylor, et al. Applicants respectfully traverse this rejection.

The Examiner argues that “claims 1-28 are rejected...as being unpatentable over claims 1-12, 21-27 of U.S. Patent No. 6,152,146...the claims of the patent contain the subject matter that is *narrower in scope* than the instant claims, rendering them obvious over each other” (Emphasis added). The Examiner points out that “the second electrodes are U-shaped with a bulbous nose region and trailing edge regions, or L-shaped with a curved nose region.”

Claims 1, 7, 8, 11, 17 and 18

For the claims of the patent to be narrower in scope, the claims of the patent **must include at least all** of the limitations of the rejected claims of the application (as well as additional limitations narrowing the patent). A U-shaped electrode does not include “two or more surfaces defining a channel for the flow of air in the downstream direction; and wherein at least two of the surfaces meet at an oblique angle” as recited in claims 1 and 11. Each surface of the U-shaped electrode (top and bottom) defines a channel for the flow of air in the downstream direction (a top channel and bottom channel). Further, an L-shaped electrode does not include “two or more surface defining a channel for the flow of air in the downstream direction.” Rather, as can be seen in FIG. 4E and 4F, only one of the surfaces defines a channel for the flow of air in the downstream direction.

Claims 2 and 12

As mentioned above, for the claims of the patent to be narrower in scope, the claims of the patent **must include at least all** of the limitations of the rejected claims of the application (as well as additional limitations narrowing the patent). The U-shaped electrodes of FIG. 4A-4C of *Taylor '146* and *'977* do not

comprise “second electrodes **nested** to form a channel for the flow of air in the downstream direction” as recited in claims 2 and 12 (Emphasis added). Further, the L-shaped electrodes shown in FIG. 4E and 4F of *Taylor '146* and *'977* are not “nested”, but rather are symmetrically positioned about an axis parallel to the flow of air.

Claims 3, 4, 13 and 14

Again, for the claims of the patent to be narrower in scope, the claims of the patent **must include at least all** of the limitations of the rejected claims of the application (as well as additional limitations narrowing the patent). The U-shaped electrodes do not comprise second electrodes that have a “tail section that is substantially wider than a [upstream] nose section” (relative to the direction of the flow of air) as recited in claims 3, 4, 13 and 14. Rather, the U-shaped electrode includes two surfaces that are parallel to one another, thus both the nose section and tail section are equivalent in width. Further, as can be seen clearly in both FIG. 4E and 4F of *Taylor '146* and *'977*, the L-shaped electrodes include nose sections substantially wider than the trailing tail section (relative to the direction of the flow of air).

Claims 5, 6, 15 and 16

The Applicants respectfully request cancellation of claims 5, 6, 15 and 16.

Claims 22, 24, 26 and 28

Again, for the claims of the patent to be narrower in scope, the claims of the patent **must include at least all** of the limitations of the rejected claims of the application (as well as additional limitations narrowing the patent). By definition, the U-shaped electrodes do not comprise second electrodes that have either “a V-shaped tail with a rounded nose” or that are “V-shaped with a rounded end” as recited in claims 22, 24, 26 and 28. Rather, the U-shaped electrode includes U-shaped tails. Further, as can be seen clearly in both FIG. 4E and 4F of *Taylor '146* and *'977*, the L-shaped electrodes are L-shaped include a single

planar surface as a tail section. The L-shaped electrodes are not V-shaped and do not include a V-shaped tail.

Claims 21, 25 and 27

Again, for the claims of the patent to be narrower in scope, the claims of the patent **must include at least all** of the limitations of the rejected claims of the application (as well as additional limitations narrowing the patent). The U-shaped electrodes do not comprise second electrodes that have a “bulbous tail” and a “rounded nose” as recited in claims 21, 25 and 27. Rather, the U-shaped electrode includes two surfaces that are parallel to one another, thus both the nose section and tail section are equivalent in width. The tail is not “bulbous”. Further, as can be seen clearly in both FIG. 4E and 4F of *Taylor* ‘146 and ‘977, the L-shaped electrodes include nose sections substantially wider than the trailing tail section, which is not “bulbous”.

Because the claims of *Taylor* ‘146 and ‘977 fail to recite all of the limitations of the rejected claims of the application as asserted by the Examiner, claims 1-4, 8-14 and 17-28 cannot be rendered obvious under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12, 21-27 of *Taylor* ‘146 and claims 1-20 of *Taylor* ‘977. The Applicants, therefore, respectfully request withdrawal of the rejection of claims 1-4, 8-14 and 17-28.

V. REJECTION UNDER 35 U.S.C. §102(E) OVER TAYLOR ET AL. (U.S. PAT. 5,975,090)

Claims 1, 3-11, 13-20, 22, 24, 26 and 28

The Examiner rejected claims 1, 3-11, 13-20, 22, 24, 26, and 28 under 35 U.S.C. § 102(e) as being anticipated by *Taylor* ‘090. The Applicants respectfully traverse the rejection of claims 1, 3, 4, 7-9, 11, 13, 14, 17-19, 22, 26 and 28.

The Examiner argues that “Taylor further teaches the second electrodes to be hollow, or have a downstream tail section that is substantially wider than an upstream nose region, or an upstream leading planar section and a downstream trailing section that is at an angle to the leading planar section, or that the surfaces are planar (see Figs. 1a-b, 4a-4k).”

Fig. 1A of *Taylor* ‘090 discloses a second electrode array **30** comprising a plurality of teardrop shaped electrodes having noses substantially wider than tails. Fig. 1B of *Taylor* ‘090 discloses a second electrode array **30** comprising a plurality of planar electrodes having substantially parallel sidewalls. Figs. 4A-4D of *Taylor* ‘090 disclose a second electrode array **240** of ‘U’-shaped electrodes **242**. Further, Figs. 4E and 4F disclose a second electrode array **240** of ‘L’-shaped electrodes **242**. Figs. 4G and 4H of *Taylor* ‘090 disclose a second electrode array **240** of substantially circular electrodes **242**. Figs. 4I-4K of *Taylor* ‘090 disclose a single ring-like electrode.

Nowhere, does *Taylor* ‘090 disclose “said second electrode includes two or more surfaces defining a channel for the flow of air in the downstream direction; and wherein at least two of the surfaces meet at an oblique angle” (Emphasis added) as recited in claims 1 and 11. For example, the U-shaped electrodes of Figs. 4A and 4B each have a first surface at least partially defining a first channel for the flow of air and a second surface at least partially defining a second channel for the flow of air, while the L-shaped electrodes of Figs. 4E and 4F include a first surface at least partially defining a first channel for the flow of air, and a second surface completely blocking and preventing the flow of air. Nowhere does *Taylor* ‘090 disclose multiple surfaces forming a single channel for the flow of air, therefore *Taylor* ‘090 cannot anticipate claims 1 and 11. Claims 7 and 8 depend from claim 1, and claims 17 and 18 depend from claim 11, and therefore cannot be anticipated by *Taylor* ‘090.

Further, *Taylor* ‘090 fails to disclose a second electrode having a tail section substantially wider relative to the direction of the flow of air than the nose section as recited in claims 3, 4, 9, 13, 14 and 19. For

example, the 'U'-shaped second electrodes disclosed in *Taylor* '090 include a tail and a nose having a similar width (the sidewalls are substantially parallel), and the 'L'-shaped second electrodes disclosed in *Taylor* '090 each include a nose substantially wider than a tail.

Further, *Taylor* '090 fails to disclose a second electrode that "is V-shaped with a rounded" nose (or end) as recited in claims 22, 24, 26 and 28. As described above, Figs. 4A-4D of *Taylor* '090 disclose a second electrode array **240** of 'U'-shaped electrodes **242**. Claims 22, 24, 26 and 28 recite second electrodes having a shuttlecock-type configuration not taught by *Taylor* '090..

Since *Taylor* '090 fails to disclose all of the features of claims 1, 3, 4, 9, 11, 13, 14, 19, 22, 26 and 28, *Taylor* '090 cannot anticipate claims 1, 3, 4, 9, 11, 13, 14, 19, 22, 26 and 28 under 35 U.S.C. §102(e). Dependent claims have at least the features of the independent claim from which they ultimately depend; therefore, *Lee* cannot anticipate dependent claims 7 and 8 (which ultimately depend from claim 1), claims 17 and 18 (which ultimately depend from claim 11) under 35 U.S.C. §102(e). Accordingly, the Applicants respectfully request the withdrawal of this rejection.

VI. REJECTION UNDER 35 U.S.C. §102(B) OVER LEE (U.S. PAT. 4,789,801)

Claims 1, 3-11, 13-20

The Examiner rejected claims 1, 3-11, and 13-20 under 35 U.S.C. § 102(b) as being anticipated by *Lee*. The Applicants respectfully traverse the rejection of claims 1, 3, 4, 7-9, 11, 13, 14, 17-19.

Referring to Figs. 1A-3, *Lee* discloses (specifically in reference to Fig. 2) "each maxisectional electrode **52'** is of a generally *teardrop cross-sectional shape*, terminating in a sharp edge **53**" (Emphasis added). See col. 5, lines 44-46. Nowhere does *Lee* disclose "wherein said second electrode includes two or more surfaces defining a channel for the flow of air in the downstream direction; and wherein at least two of the surfaces meet at an oblique angle" (Emphasis added) as recited in claims 1 and 11. As described

above, the teardrop shaped electrode **52'** described by *Lee* includes a top surface at least partially forming one channel for the flow of air, and a bottom surface at least partially forming a second channel for the flow of air. Nowhere does *Lee* disclose an electrode having multiple surfaces forming a single channel for the flow of air, as recited in claims 1 and 11.

Further, *Lee* fails to disclose a second electrode having a "tail being substantially wider relative to the flow of air than the nose" as recited in claims 9 and 19, or "a tail section that is substantially wider than a nose section" as recited in claims 3 and 13, or "a downstream tail section that is substantially wider than an upstream nose section" as recited in claims 4 and 14. For example, the 'U'-shaped second electrodes disclosed in *Lee* include a tail and a nose having a similar width (the sidewalls are substantially parallel), and the 'L'-shaped second electrodes disclosed in *Lee* each include a nose substantially wider than a tail.

Referring further to Fig. 2, *Lee* discloses "each maxisectional electrode **52'** is of a generally teardrop cross-sectional shape, *terminating in a sharp edge 53*...a copious supply of negative ions is produced at each of the sharp edges **53**." (Emphasis added). See col. 5, lines 44-46. Referring to Fig. 1, *Lee* also discloses "maxisectional electrodes **16'** [that] are circular or substantially circular." Nowhere does *Lee* disclose a "second electrode [that] has a tail and a nose, *the tail* being substantially wider relative to the flow of air than the nose" as recited in claims 9 and 19. The Applicants respectfully request that the Examiner specifically point out where this feature is disclosed by *Lee*.

Since *Lee* fails to disclose all of the features of claims 1, 3, 4, 9, 11, 13, 14 and 19, *Lee* cannot anticipate claims 1, 3, 4, 9, 11, 13, 14 and 19 under 35 U.S.C. §102(b). Dependent claims have at least the features of the independent claim from which they ultimately depend; therefore, *Lee* cannot anticipate dependent claims 7 and 8 (which ultimately depend from claim 1), and claims 17 and 18 (which ultimately depend from claim 11) under 35 U.S.C. §102(b). Accordingly, the Applicants respectfully request the withdrawal of this rejection.

VII. REJECTION UNDER 35 U.S.C. §103(A) OVER *TAYLOR* '090

Claims 2, 12, 21, 23, 25 and 27

The Examiner rejected claims 2, 12, 21, 23, 25 and 27 under 35 U.S.C. § 103(a) as being unpatentable over *Taylor* '090 as applied to claims 1, 9, 11 and 19 above. The Applicants respectfully traverse this rejection.

The Examiner argues that "Taylor differs...because the reference teaches a small rounded end is located away instead of near the first electrodes. However, it would have been obvious...that whether the second electrodes are positioned such that the small rounded end would be away or near the first electrodes would be *an obvious matter of design*; because the air conditioning system *would work equally well in either position* of the second electrodes. Moreover, Applicants have not disclosed whether this particular position of the second electrodes would be more advantageous than the other position" (Emphasis added).

On the contrary, the prior art specifically teaches that electrode arrangement influences electrode performance. For example, with regard to Figs. 4A and 4C *Taylor* '090 discloses that "each 'U'-shaped electrode **242** has two trailing edges **244** that *promote efficient kinetic transport of the outflow of ionized air and 03*" (Emphasis added). See col. 8, lines 38-42. With regard to Fig. 4C *Taylor* '090 discloses that "it will be appreciated that the configuration of second electrode array **240** in FIG. 4C *can be more robust* than the configuration of FIGS. 4A and 4B, by virtue of the shorter trailing edge geometry" (Emphasis added). See col. 8, lines 50-53. *Taylor* '090 cites *Lee*, illustrating the teardrop shape of *Lee*. *Lee* discloses a teardrop shape "terminating in a sharp edge **53**. A copious supply of negative air ions is produced at each of the sharp edges **53**...to produce substantial air flow in the direction of arrows **55**." See *Lee* col. 5, lines 46-50.

The prior art, in fact, clearly teaches that the air conditioning system **does NOT** work equally well in different configurations, contrary to the Examiner's assertions. The prior art, in fact, teaches away from

the use of geometries “wherein said plurality of second electrodes are nested to form a channel for the flow of air in the downstream direction; and wherein each of said plurality of second electrodes *includes at least one bend*, the at least one bend being coordinated to support nesting” (Emphasis added) as recited in claims 2 and 12, and geometries “wherein said second electrode is teardrop-shaped with a small rounded nose and a large bulbous tail” as recited in claims 21, 23, 25 and 27.

In addition, the specification for the Applicants’ invention recites why these particular positions of the second electrodes are more advantageous, describing the novel geometries as “[enhancing] the particle capture efficiency of the electrode assembly **220**...a ‘U’-shaped second electrode **242** without an angled blade extension **294**, as shown in Fig. 5A, might allow a larger particle to pass through the electrode assembly **220** uncaptured...the increased width W’ of the angled extension **246** is intended to capture the larger particles” (Emphasis added). See paragraph 130.

Since *Taylor* ‘090 fails to teach or suggest all of the features of claims 2, 12, 21, 23, 25 and 27 and **teaches away** from the features of claims 2, 12, 21, 23, 25 and 27, *Taylor* ‘090 cannot render claims 2, 12, 21, 23, 25 and 27 obvious under 35 U.S.C. § 103(a). Accordingly, the Applicants respectfully request the withdrawal of this rejection.

VIII. REJECTION UNDER 35 U.S.C. §103(A) OVER *LEE*

Claims 2, 12, 21, 23, 25 and 27

Claims 2, 12, 21, 23, 25, and 27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lee as applied to claims 1, 9, 11, and 19 above. The Applicants respectfully traverse this rejection.

As argued directly above in Section VII, the prior art specifically teaches that electrode arrangement influences electrode performance. *Lee* discloses a teardrop shape “terminating in a sharp edge **53**. A copious

supply of negative air ions is produced at each of the sharp edges 53...to produce substantial air flow in the direction of arrows 55.” See *Lee* col. 5, lines 46-50.

Again, the prior art teaches that the air conditioning system does not work equally well in different configurations. The prior art, in fact, teaches away from the use of geometries “wherein said plurality of second electrodes are nested to form a channel for the flow of air in the downstream direction; and wherein each of said plurality of second electrodes *includes at least one bend*, the at least one bend being coordinated to support nesting”(Emphasis added) as recited in claims 2 and 12, and geometries “wherein said second electrode is teardrop-shaped with a small rounded nose and a large bulbous tail” as recited in claims 21, 23, 25 and 27.

Also as described above, the specification for the Applicants’ invention recites why these particular positions of the second electrodes are more advantageous, describing the novel geometries as “[enhancing] the particle capture efficiency of the electrode assembly 220...the increased width W’...is intended to capture the larger particles.” See paragraph 130.

Since *Lee* fails to teach or suggest all of the features of claims 2, 12, 21, 23, 25 and 27, *Lee* cannot render claims 2, 12, 21, 23, 25 and 27 obvious under 35 U.S.C. § 103(a). Accordingly, the Applicants respectfully request the withdrawal of this rejection.

IX. ADDITIONAL CLAIMS

Claims 29 and 30

The newly added claims are, it is submitted, allowable over the cited art.

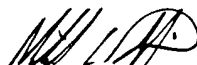
X. CONCLUSIONS

In light of the above, it is respectfully submitted that all of the claims now pending in the subject patent application should be allowable, and a Notice of Allowance is requested. The Examiner is respectfully requested to telephone the undersigned if he can assist in any way in expediting issuance of a patent.

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 06-1325 for any matter in connection with this response, including any fee for extension of time, which may be required.

Respectfully submitted,

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